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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/606,210	06/29/2000	Govind Malalur	P108339-09053	8162

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EXAMINER

NGUYEN, BRIAN D

ART UNIT PAPER NUMBER

2661

DATE MAILED: 08/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/606,210

Applicant(s)

MALALUR, GOVIND

Examiner

Brian D Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 June 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 11,12 and 17-31 is/are allowed.
- 6) ☒ Claim(s) 1,3-10 and 13-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 3-10, and 13-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kerstein et al (6,393,548) in view of Alexander et al (5,909,564).

Regarding claims 1 and 9, Kerstein discloses a network switch (12) comprising a plurality of data ports; a plurality of statistics counters for monitoring operational parameters; statistics registers; a statistics gathering circuit for reading the statistics registers, and for transmitting data from the statistics registers to a remote system memory (34) (see abstract; figures 1 & 2; col. 4, lines 19-48). Kerstein does not specifically disclose the data are transmitted from the registers to the remote memory via a DMA. However, Alexander discloses transmitting data from the register to the remote memory via a DMA (see abstract; figures 1 & 2; col. 2, lines 5-10; col. 6, lines 1-3; col. 13, lines 19-21). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to use the technique of transferring data from the registers to the external memory using a DMA operation as taught by Alexander in the system of Kerstein in order to reduce burdens on the central processor.

Regarding claims 3-4, Kerstein further discloses periodically update all the per port statistics (see col. 10, lines 1-2), Kerstein does not specifically disclose the use of a timer unit and a timer value indicating a number of system clock cycles which determines the

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predetermined period. However, it is obvious that a predetermined period is based on a number of clock cycles and a timer is used to measure time. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to use the timer for measuring time so that the statistics registers can be repeatedly read and transmit to the remote memory in order to prevent overflow in the internal memory.

Regarding claims 5-6, Alexander discloses the data in the external memory can be accessed by a remote CPU (management stations) (see col. 6, lines 44-48). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to access the external memory from a remote CPU as taught by Alexander in the system of Kerstein so that the switch can be remotely controlled.

Regarding claim 10, Kerstein in view of Alexander do not specifically disclose storing data in a predetermined section of the remote memory. However, it is obvious that the data must be stored in a predetermined section where the data is assigned so that the data can be located and retrieve when needed

Regarding claims 7-8, Kerstein discloses the switch comprises a communication channel (bus) (see col.1, lines 26-31).

Regarding claims 13-16, claims 13-16 are method claims that have substantially all the limitation of the respective apparatus claims 1, 3-5, and 10. In addition, claim 13 recites the limitation reconstructing the statistics register in the remote system memory. However, Alexander implicitly discloses reconstructing the statistics register in the remote system memory because without reconstructing, the data will not be able to store to the external memory or retrieve from the memory.

Allowable Subject Matter

3. Claims 11-12 and 17-31 are allowed.

Response to Arguments

4. Applicant's arguments filed 6/1/04 have been fully considered but they are not persuasive. The applicant argued that the cited references (Kerstein and Alexandria) fail to disclose all of the elements of independent claims 1 and 13. The examiner disagrees because Kerstein in view of Alexandria disclose all the elements of the claims as described in the Office Action. In fact, Kerstein discloses all the claimed subject matter including a remote memory (34) and a direct memory access (DMA) except for specifically disclose the data are transmitted from the registers to the remote memory via a DMA. However, this feature is obvious and Alexandria explicitly discloses this limitation. The examiner respectfully remind the applicant that even a conventional network switch must has a statistic counter for monitoring operational parameters. The operational parameters can be any parameter as simply as the number of cells enters the port. Kerstein discloses the use of an external memory, therefore, a statistic gathering circuit must be employed in assisting the reading and transmitting data from the statistic registers to the remote system memory.

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian D Nguyen whose telephone number is (571) 272-3084. The examiner can normally be reached on 7:30-6:00 Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Doug Olms can be reached on (703) 305-4703. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



8/20/04

BRIAN NGUYEN
PRIMARY EXAMINER